Defense POW/Missing Personnel Office

Operations Directorate — Fact Sheet

PRESS ACTD

ISSUE: Personnel Recovery Extraction Survivability aided by Smart-Sensors (PRESS) Advanced Concept Technology Demonstration (ACTD)

PURPOSE: The PRESS ACTD will identify, demonstrate, conduct the joint military utility assessment (JMUA) and determine the initial availability of the technical means to correct Personnel Recovery (PR) mission deficiencies. These deficiencies include: location/ID; tagging, tracking and locating (TTL); situational awareness (SA); and improved survivability of evaders and recovery forces. This will expand capabilities of existing recovery forces and systems, enable support of mandated PR responsibilities and enable new operational concepts for PR operations.

OBJECTIVES AND APPROACH:

The PRESS ACTD is designed to demonstrate effective and affordable PR systems that reduce reaction/recovery time, increase location/ID accuracy; provide timely TTL, increase Force protection and SA; improve Command, Control and Communications (C^3) interoperability, improve survivability, and leverages mature technologies and capabilities. This will be conducted in two overlapping phases followed by the Extended User Evaluation (EUE).

- Phase I, FY01-02, will demonstrate and transition the Global Personnel Recovery System (GPRS) space and ground station hardware/software, less military components, and any C^3ISR capabilities with proven joint military utility relative to PR TTL, SA, interoperability, etc.
- Phase II, FY02-04, will demonstrate and transition a comprehensive, integrated, advanced PR concept, incorporating a full array of technologies to support PR mission planning and execution. It will employ the results of Phase I to provide warfighters with real time, automated, precision survivor location and tracking; survivor re-supply; highly survivable extraction aircraft; and integrated, semi-automated, real time SA and mission management capabilities. Survivability and SA enhancements will include optical and infrared countermeasures, improved sensors and decision aids, TTL, use of Unmanned Aerial Vehicles (UAVs) and Smart Sensor Web (SSW).

EUE, FY05-06, completes transition of technologies; validates the Tactics, Techniques and Procedures (TTPs), Concept of Operations (CONOPs) and training methods; and includes technical support to warfighters. Transition strategies are developed in concert with the JMUA.

Specific plans include:

- 2001: Conduct study to integrate GPRS public and government segments, radio tags, TENCAP and Combat Survivor Evader Locator (CSEL) systems. Install baseline GPRS on HH-60G helicopter to provide a prototype command, control and tracking system. Conduct modeling & simulation (M&S) of extraction survivability and situational awareness potential of cognitive decision aiding system (CDAS), rapid terrain visualization, infrared countermeasures (IRCM), passive millimeter wave (PMMW) Imaging, obstacle avoidance, non-lethal weapons and UAVs.
- 2002: Design GPRS space hardware for integration on GPS Block III, FY04. Complete prototype design and build of miniature GPRS user device. Demonstrate technologies and conduct military utility assessment of Phase I survivor/evader systems. Complete M&S and preliminary design to integrate extraction survivability technologies on HH-60G . Conduct test of CDAS, IRCM, PMMW Imaging, obstacle avoidance, and non-lethal weapon subsystems.
- 2003: Complete space hardware design, fabrication and testing of GPRS user device. Conduct fabrication, build-up, integration and preliminary testing of HH-60G extraction survivability sensors and suite. Develop Phase II demonstration and JMUA plan. Conduct connectivity testing and preliminary user evaluation in relevant warfighter tactical environment.
- 2004: Integration tests, vehicle installations, training, airworthiness release, user evaluations.
- 2005-06: Conduct Extended User Evaluation.

S&T Funding (Dollar Amounts in Millions)

PE	PE	FY01	FY02	FY03	FY04	FY05	FY06	Total
DUSD(S&T)	PE 0603232D	.500	1.000	.375	.375	0	0	2.250
Army (CDA)	PE 0603003A	.100	.100	.100	.100	0	0	.400
DARPA	PE 0603285E	.050	.150	.050	.150	0	0	.400
DUSD(AS&C)	PE 63750D8Z	1.000	2.500	3.000	3.500	0	0	10.000
TOTAL Funding		**1.650**	**3.750**	**3.525**	**4.125**	**0**	**0**	**13.050**
PE	**PE**	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**Total**

Non-S&T Funding (Dollar Amounts in Millions)

PE	PE	FY01	FY02	FY03	FY04	FY05	FY06	Total
Air Force	PE 0207224F	0	.500	.500	.500	0	0	1.500
Army (ATIRCM)	PE 0604270A	0	.400	1.300	0	0	0	1.700
Army (ATIRCM)	AZ 030507	0	0	0	.300	0	0	.300
Air Force (TENCAP)	PE 0207246F	1.000	1.500	1.500	.480	0	0	4.480
SOCOM	PE 1160402BB	.050	.150	.050	.150	0	0	.400
NASA / USCG / OGA	RTOP	4.000	4.000	4.000	4.100	0	0	16.100
JPRA	PE 0901212F	.200	.200	.200	.200	0	0	.800
DPMO	PE 91536BU	0	1.000	1.000	.400	0	0	2.400
Industry	IR&D	1.000	1.400	2.500	2.000	0	0	6.900
TOTAL Funding		**6.250**	**9.150**	**10.050**	**8.130**	**0**	**0**	**34.580**

NOTE: The above funding sources and levels denote leveraged efforts from ongoing agency / industry programs. These programs represent product in kind that will be provided to the PRESS ACTD, rather than a transfer of funds.